



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/992,129	12/17/97	COLEMAN	S 97-424

MARIO J DONATO JR
CATERPILLAR INC
PATENT DEPARTMENT AB6490
100 NE ADAMS STREET
PEORIA IL 61629-6490

MM71/1015

EXAMINER
NGUYEN, T

ART UNIT	PAPER NUMBER
2832	

DATE MAILED: 10/15/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/992,129

Applicant(s)
Coleman et al.

Examiner
Tuyen T. Nguyen

Group Art Unit
2832



☐ Responsive to communication(s) filed on _____

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1, 2, and 4-6 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 2, and 4-6 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2832

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Pham (US 5,339,063).

Regarding claim 1, Pham discloses a solenoid stator assembly adapted to be mounted upon a mounting seat of a fuel injector valve, comprising:

an insulative housing (40) having an upper end, a lower end, and a base adapted to fit on the mounting seat of the fuel injector valve; (figure 3)

a substantially E-shaped stator core (10) disposed within the insulative housing, said stator core including a top portion (22) having a first end in-line with a second end (see figure 4), a first outer pole piece (24) depending generally perpendicularly from said first end, a second outer pole piece (24) depending generally perpendicularly from said second end, and

a central pole piece (26) depending generally perpendicularly from a region of the top portion located substantially central to the first and second outer pole pieces and in a direction substantially parallel to that of the first and second outer pole pieces, the first and second outer

Art Unit: 2832

pole pieces and the central pole piece each having a distal end (see figure 4) forming a face (see figure 4), each face being substantially flush with the base of the housing; and

a reinforcement band (9) disposed about the lower end of the insulative housing;

said insulative housing being molded to said stator core and enveloping the stator assembly except for the faces of the first and second outer pole pieces and of the central pole piece, said insulative housing being reinforced by said reinforcement band against expanding cavity pressure developed within the assembly by fuel pressure within the fuel injector valve.

Regarding claim 2, Pham discloses the reinforcement band is integrally formed with the insulative housing.

Regarding claim 4, Pham discloses the reinforcement band substantially annular.

Regarding claim 5, Pham discloses the reinforcement band extends a predetermined distance upwardly from the base of the housing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2832

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pham (US 5,339,063).

Pham inherently discloses the insulative housing includes mounting portions **adapted to** receive securing means for securing said insulative housing to said fuel injector (see figure 6). It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138, 33 CCPA 879 (1946). MPEP 706.03(c).

Response to Arguments

5. Applicant's arguments filed Aug. 31, 1998 have been fully considered but they are not persuasive. Applicant argues that (1) there's no teaching in Pham that would lead one to place a reinforcement band about the lower portion of the insulative housing, (2) Pham does not disclosed any teaching of the reinforcement band extends a predetermined distance upwardly from the base of the housing, and (3) the insulative housing of Pham does not have the mounting portions. The Examiner disagrees. As to (1), Pham inherently discloses the reinforcement band (9) **about** the lower portion of the insulative housing. MPEP 2173.05(b) Relative terminology The court held that claims reciting "at least about" were invalid for indefiniteness where there was close prior art and there was nothing in the specification, prosecution history, or the prior art

Art Unit: 2832

to provide any indication as to what range of specific activity is covered by the term "about".

Amgen v. Chugai Pharmaceutical Co. Ltd., 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991).

The term "about" used to define the area of the lower end of a mold as between 25 to about 45% of the mold entrance was held to be clear, but flexible. Ex parte Eastwood, 163 USPQ 316 (Bd. App. 1968). Similarly, in W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), the court held that a limitation defining the stretch rate of a plastic as "exceeding about 10% per second" is definite because infringement could clearly be assessed through the use of a stopwatch. As to (2), Pham discloses the reinforcement band (9) extends a **predetermined distance** upwardly from the base of the housing. "A predetermined distance" here in Pham is from the base of the housing to the top of the insulative housing. As to (3), Pham inherently discloses the mounting portion (figure 6) in the insulative housing.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2832

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Gellner, can be reached on (703) 308-1721. The fax phone number for this Group is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782


Michael L. Gellner
Supervisory Patent Examiner
Technology Center 2800

TTN

Tuyen T. Nguyen

Patent Examiner - Art Unit 2832

Oct 12, 1998